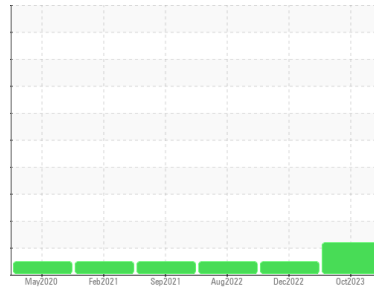




OIL ANALYSIS REPORT

Sample Rating Trend



COOL CHEMICALS



Machine Id
8102

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (--- LTR)

DIAGNOSIS

Recommendation

Check for low coolant level. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative. There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service (see recommendation).

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0094461	GFL0055394	GFL0055425
Sample Date	Client Info	02 Oct 2023	07 Dec 2022	18 Aug 2022
Machine Age	hrs	16329	16329	16329
Oil Age	hrs	16329	16329	16329
Oil Changed	Client Info	N/A	Changed	Changed
Sample Status		ATTENTION	NORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >50	23	12	11
Chromium	ppm	ASTM D5185(m) >4	3	<1	<1
Nickel	ppm	ASTM D5185(m) >2	<1	<1	0
Titanium	ppm	ASTM D5185(m)	0	<1	<1
Silver	ppm	ASTM D5185(m) >3	<1	0	<1
Aluminum	ppm	ASTM D5185(m) >9	2	2	3
Lead	ppm	ASTM D5185(m) >30	4	<1	2
Copper	ppm	ASTM D5185(m) >35	1	<1	<1
Tin	ppm	ASTM D5185(m) >4	0	<1	<1
Antimony	ppm	ASTM D5185(m)	0	<1	0
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m) 50	15	12	47
Barium	ppm	ASTM D5185(m) 5	<1	0	0
Molybdenum	ppm	ASTM D5185(m) 50	58	60	112
Manganese	ppm	ASTM D5185(m) 0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m) 560	575	543	649
Calcium	ppm	ASTM D5185(m) 1510	1630	1577	1340
Phosphorus	ppm	ASTM D5185(m) 780	753	732	673
Zinc	ppm	ASTM D5185(m) 870	960	878	799
Sulfur	ppm	ASTM D5185(m) 2040	2076	2125	2376
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >+100	5	6	6
Sodium	ppm	ASTM D5185(m)	▲ 203	7	14
Potassium	ppm	ASTM D5185(m) >20	2	0	<1
Glycol	%	ASTM D7922*	0.0	---	---

INFRA-RED

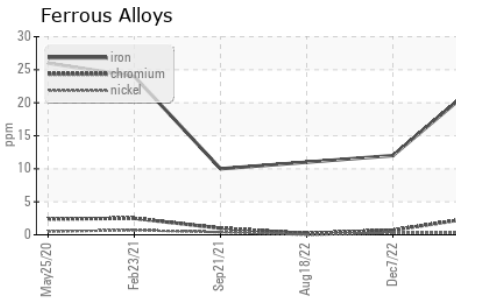
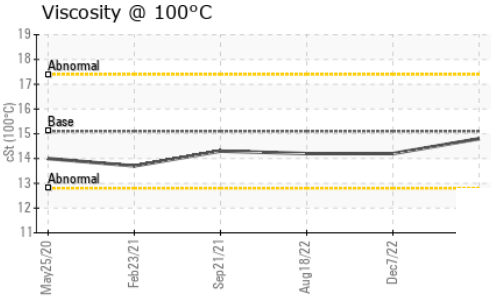
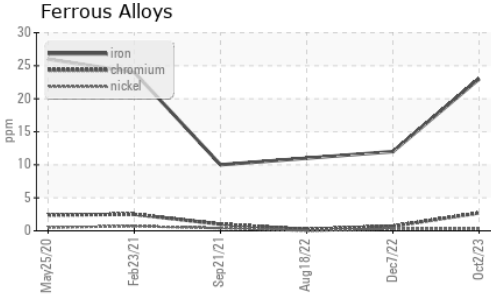
method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	10.7	6.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.0	21.8

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.6	15.0



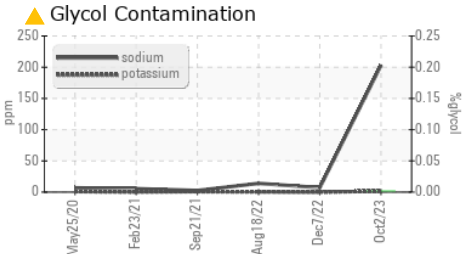
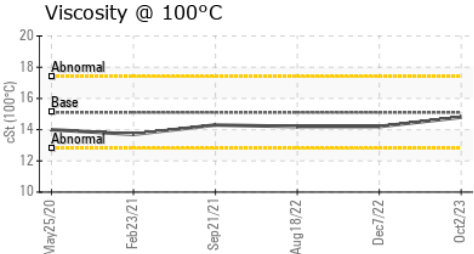
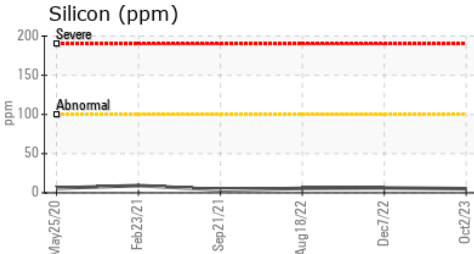
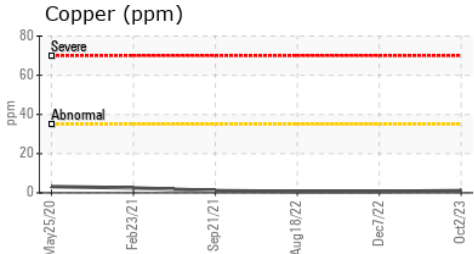
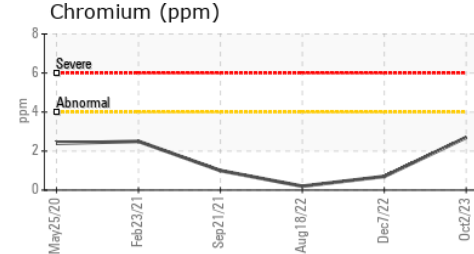
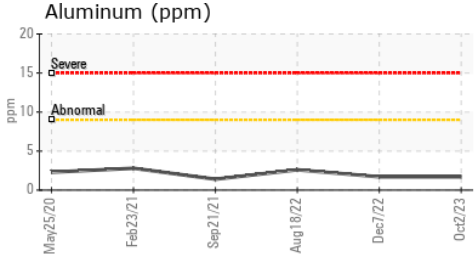
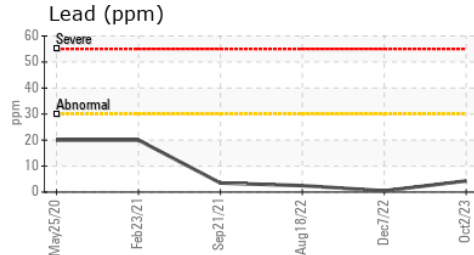
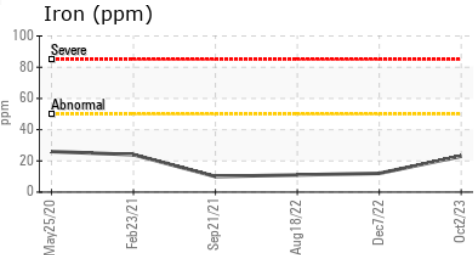
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	---	---
Precipitate	scalar	Visual*	NONE	---	---
Silt	scalar	Visual*	NONE	---	---
Debris	scalar	Visual*	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	---	---
Appearance	scalar	Visual*	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	14.8	14.2

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0094461
Lab Number : 02586715
Unique Number : 5655781
Test Package : MOB 1 (Additional Tests: Glycol, Visual)
 Received : 04 Oct 2023
 Diagnosed : 04 Oct 2023
 Diagnostician : Kevin Marson
 To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

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